

DECLARATION FOR UNITED STATES PATENT APPLICATION,
POWER OF ATTORNEY, DESIGNATION OF CORRESPONDENCE ADDRESS

As a below named inventor, I hereby declare that my residence, post office address and citizenship are as stated below next to my name, and that I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled ELECTRIC POWER NETWORK, the specification of which

☐ is attached hereto.

☐ was filed in the United States Patent and Trademark Office on _____, and given Application Number _____;

☒ was filed under the Patent Cooperation Treaty on 22 December 2004, and given Application No. PCT/SE2004/002003, the United States of America having been designated.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, §1.56(a).

I HEREBY CLAIM foreign priority benefits under Title 35, United States Code §119(a)-(d) of §365(b) of any foreign application(s) for patent or inventor's certificate, or §365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below any foreign application for patent or inventor's certificate or of any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number	Country	Foreign Filing Date	Priority Claimed
0303574-8	Sweden	23 December 2003	Yes

I HEREBY CLAIM the benefit under Title 35, United States Code §119(e) of any United States provisional application(s) listed below.

U.S. Provisional Application Number	Filing Date

I HEREBY CLAIM the benefit under Title 35, United States Code, §120 of any United States application(s), or §365(c) of any PCT International application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of Title 35, United States Code §112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, §1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application.

U.S. Patent Application No.	PCT Patent Application No.	Patent Filing Date	Parent Patent No.

I hereby appoint the registered attorneys and agents of VENABLE LLP associated with the following customer number to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

26694

U.S. PATENT AND TRADEMARK OFFICE

VENABLE LLP is located at 575 7th Street, NW, Washington, DC 20004-1601, Telephone: (202) 344-4000, Telefax: (202) 344-8300. Address all correspondence to VENABLE LLP, Post Office Box 34385, Washington, D.C. 20043-9998.

The undersigned hereby authorizes the U.S. attorneys named herein to accept and follow instructions from the undersigned's assignee, if any, and/or, if the undersigned is not a resident of the United States, the undersigned's domestic attorney, patent attorney or patent agent, as to any action to be taken in the Patent and Trademark Office regarding this application without direct communication between the U.S. attorneys and the undersigned. In the event of a change in the person(s) from whom instructions may be taken, the U.S. attorneys named herein will be so notified by the undersigned.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under § 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Signature: Hans C. Christensen Date: 2/4 - 2007
First/Joint Inventor: Hans Christian CHRISTENSEN
Citizenship: Denmark
Residence and Post Office Address: ~~Sportsmagervej 2~~, DK-2400 COPENHAGEN, Denmark

Fordresgaardvej 25

Signature: _____ Date: _____
First/Joint Inventor: Lars GERTMAR
Citizenship: Sweden
Residence and Post Office Address: Humlegatan 6, S-SE-722 26 VÄSTERÅS, Sweden

Signature: _____ Date: _____
First/Joint Inventor: Sture LINDAHL
Citizenship: Sweden
Residence and Post Office Address: Gässlingavägen 5B, S-SE-227 35 LUND, Sweden

Signature: _____ Date: _____
First/Joint Inventor: Juhani MANTERE
Citizenship: Finland
Residence and Post Office Address: Nurmitie 3, FIN-SF-04300 TUUSULA, Finland

Signature: Erik Koldeby Date: 28/3 - 2007
First/Joint Inventor: Erik KOLDBY NIELSEN
Citizenship: Denmark
Residence and Post Office Address: Dyrupgaardvaenget 6, DK-5250 ODENSE, Denmark

Signature: Leif-Erik Wraae Date: 28/3 - 2007
First/Joint Inventor: Leif-Erik WRAAE
Citizenship: Denmark
Residence and Post Office Address: ~~B~~rosselvaenget 17, DK-5690 TOMMERUP, Denmark

D

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The undersigned hereby authorizes the U.S. attorneys named herein to accept and follow instructions from the undersigned's assignee, if any, and/or, if the undersigned is not a resident of the United States, the undersigned's domestic attorney, patent attorney or patent agent, as to any action to be taken in the Patent and Trademark Office regarding this application without direct communication between the U.S. attorneys and the undersigned. In the event of a change in the person(s) from whom instructions may be taken, the U.S. attorneys named herein will be so notified by the undersigned.

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Signature: _____ Date: _____

First/Joint Inventor: Hans Christian CHRISTENSEN

Citizenship: Denmark

Residence and Post Office Address: Sporemagervej 2, DK-2400 COPENHAGEN, Denmark

Signature: Lars Gertmar Date: 2007-05-18

First/Joint Inventor: Lars GERTMAR

Citizenship: Sweden

Residence and Post Office Address: Humlegatan 6, S-SE-722 26 VÄSTERÅS, Sweden

Signature: Sture Lindahl Date: 2007-03-27

First/Joint Inventor: Sture LINDAHL

Citizenship: Sweden

Residence and Post Office Address: Gässlingavägen 5B, S-SE-227 35 LUND, Sweden

Signature: _____ Date: _____

First/Joint Inventor: Juhani MANTERE

Citizenship: Finland

Residence and Post Office Address: Nurmitie 3, FIN-SF-04300 TUUSULA, Finland

Signature: _____ Date: _____

First/Joint Inventor: Erik KOLDBY NIELSEN

Citizenship: Denmark

Residence and Post Office Address: Dyrupgaardvaenget 6, DK-5250 ODENSE, Denmark

Signature: _____ Date: _____

First/Joint Inventor: Leif-Erik WRAAE

Citizenship: Denmark

Residence and Post Office Address: Krosselvaenget 17, DK-5690 TOMMERUP, Denmark

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Signature: _____ Date: _____
First/Joint Inventor: Hans Christian CHRISTENSEN
Citizenship: Denmark
Residence and Post Office Address: Spørmagervej 2, DK-2400 COPENHAGEN, Denmark

Signature: _____ Date: _____
First/Joint Inventor: Lars GERTMAR
Citizenship: Sweden
Residence and Post Office Address: Humlegatan 6, S-SE-722 26 VÄSTERÅS, Sweden

Signature: _____ Date: _____
First/Joint Inventor: Sture LINDAHL
Citizenship: Sweden
Residence and Post Office Address: Gässlingavägen 5B, S-SE-227 35 LUND, Sweden

Signature: Juhani Mantere Date: 2007-03-26
First/Joint Inventor: Juhani MANTERE
Citizenship: Finland
Residence and Post Office Address: Nurmitie 3, FIN-SF-04300 TUUSULA, Finland

Signature: _____ Date: _____
First/Joint Inventor: Erik KOLDBY NIELSEN
Citizenship: Denmark
Residence and Post Office Address: Dyrupgaardvaenget 6, DK-5250 ODENSE, Denmark

Signature: _____ Date: _____
First/Joint Inventor: Leif-Erik WRAAE
Citizenship: Denmark
Residence and Post Office Address: Krosselvaenget 17, DK-5690 TOMMERUP, Denmark

ASSIGNMENT OF APPLICATION FOR UNITED STATES LETTERS PATENT

WHEREAS Hans Christian CHRISTENSEN, Spørmagervej 2, DK-2400 COPENHAGEN, Denmark; Lars GERTMAR, Humlegatan 6, S-SE-722 26 VÄSTERÅS, Sweden; Sture LINDAHL, Gässlingavägen 5B, S-SE-227 35 LUND, Sweden; Juhani MANTERE, Nurmitie 3, FIN-SF-04300 TUUSULA, Finland; Erik KOLDBY NIELSEN, Dyrupgaardvaenget 6, DK-5250 ODENSE, Denmark; and Leif-Erik WRAAE, Krosselvaenget 17, DK-5690 TOMMERUP, Denmark, hereinafter (collectively) referred to as the assignor, has invented certain improvements relating to ELECTRIC POWER NETWORK for which said assignor has caused an application for United States Letter Patent to be prepared,

- [] the inventor's declaration for said application being executed concurrently with the execution of this instrument;
- [] said application to be filed in the United States Patent and Trademark Office;
- [] said Non-Provisional application having been filed in the United States Patent and Trademark Office on _____, and given Application Number _____;
- [X] said application having been filed under the Patent Cooperation Treaty on 22 December 2004, and given Application No. PCT/SE2004/002003, the United States of America having been designated.

AND WHEREAS ABB RESEARCH LTD.
 Affolternstrasse 52
 CH-8050 Zürich
 Switzerland

hereinafter referred to as the assignees is desirous of acquiring the entire right, title and interest in and to said application, including any divisions and continuations thereof, and in and to said invention and any patents which may be granted therefor, including any renewals, reissues and prolongations thereof;

NOW THIS WITNESSETH, that for and in consideration of One Dollar (\$1.00), and other good and valuable consideration paid by said assignee to said assignor, the receipt of which is hereby acknowledged, said assignor hereby assigns, sells and transfers to said assignee, and said assignee's successors and assigns, the entire and exclusive right, title and interest in and to said invention and to said application, including any divisions and continuations thereof, and in any patents which may be granted therefor, including any renewals, reissues and prolongations thereof; said assignee, and said assignee's successors and assigns, to have, hold, exercise and enjoy the said invention and said application, including any divisions and continuations thereof, and any patents which may be granted therefor, including any renewals, reissues and prolongations thereof, with all the rights, powers, privileges and advantages in anywise arising from or appertaining thereto, for and during the term or terms of any such patents when granted, including any renewals, reissues and prolongations thereof, for the use and benefit of said assignee, and said assignee's successors and assigns, in as ample and beneficial a manner as the said assignor might or could have held and enjoyed the same, if this assignment had not been made.

AND said assignor hereby agrees to perform, upon the request of said assignee, or said assignee's successors or assigns, any acts relating to the obtaining or to the asserting of said patents, including any renewals, reissues and prolongations thereof.

AND said assignor authorizes and requests the Commissioner of Patents and Trademarks to issue Letters Patent on said application, and on any divisions and continuations thereof, to said assignee, and said assignee's successors and assigns, in accordance herewith.

EXECUTED, this twelve day of April, 2, 2006

Signature: Hans C. Christensen
Name: Hans Christian CHRISTENSEN
Address: Spørmagervej 2, DK-2400 COPENHAGEN, Denmark
Fordresgaardvej 25

EXECUTED, this ____ day of _____, 2006

Signature: _____
Name: Lars GERTMAR
Address: Humlegatan 6, S-SE-722 26 VÄSTERÅS, Sweden

ASSIGNMENT OF APPLICATION FOR UNITED STATES LETTERS PATENT

WHEREAS Hans Christian CHRISTENSEN, Sporemagervej 2, DK-2400 COPENHAGEN, Denmark; Lars GERTMAR, Humlegatan 6, S-SE-722 26 VÄSTERÅS, Sweden; Sture LINDAHL, Gässlingavägen 5B, S-SE-227 35 LUND, Sweden; Juhani MANTERE, Nurmitie 3, FIN-SF-04300 TUUSULA, Finland; Erik KOLDBY NIELSEN, Dyrupgaardvaenget 6, DK-5250 ODENSE, Denmark; and Leif-Erik WRAAE, Krosselvaenget 17, DK-5690 TOMMERUP, Denmark, hereinafter (collectively) referred to as the assignor, has invented certain improvements relating to ELECTRIC POWER NETWORK for which said assignor has caused an application for United States Letter Patent to be prepared,

- [] the inventor's declaration for said application being executed concurrently with the execution of this instrument;
- [] said application to be filed in the United States Patent and Trademark Office;
- [] said Non-Provisional application having been filed in the United States Patent and Trademark Office on _____, and given Application Number _____;
- [X] said application having been filed under the Patent Cooperation Treaty on 22 December 2004, and given Application No. PCT/SE2004/002003, the United States of America having been designated.

AND WHEREAS ABB RESEARCH LTD.
 Affolternstrasse 52
 CH-8050 Zürich
 Switzerland

hereinafter referred to as the assignees is desirous of acquiring the entire right, title and interest in and to said application, including any divisions and continuations thereof, and in and to said invention and any patents which may be granted therefor, including any renewals, reissues and prolongations thereof;

NOW THIS WITNESSETH, that for and in consideration of One Dollar (\$1.00), and other good and valuable consideration paid by said assignee to said assignor, the receipt of which is hereby acknowledged, said assignor hereby assigns, sells and transfers to said assignee, and said assignee's successors and assigns, the entire and exclusive right, title and interest in and to said invention and to said application, including any divisions and continuations thereof, and in any patents which may be granted therefor, including any renewals, reissues and prolongations thereof; said assignee, and said assignee's successors and assigns, to have, hold, exercise and enjoy the said invention and said application, including any divisions and continuations thereof, and any patents which may be granted therefor, including any renewals, reissues and prolongations thereof, with all the rights, powers, privileges and advantages in anywise arising from or appertaining thereto, for and during the term or terms of any such patents when granted, including any renewals, reissues and prolongations thereof, for the use and benefit of said assignee, and said assignee's successors and assigns, in as ample and beneficial a manner as the said assignor might or could have held and enjoyed the same, if this assignment had not been made.

AND said assignor hereby agrees to perform, upon the request of said assignee, or said assignee's successors or assigns, any acts relating to the obtaining or to the asserting of said patents, including any renewals, reissues and prolongations thereof.

AND said assignor authorizes and requests the Commissioner of Patents and Trademarks to issue Letters Patent on said application, and on any divisions and continuations thereof, to said assignee, and said assignee's successors and assigns, in accordance herewith.

EXECUTED, this ____ day of _____, 2006

Signature: _____
Name: Hans Christian CHRISTENSEN
Address: Sporemagervej 2, DK-2400 COPENHAGEN, Denmark

EXECUTED, this 18 day of May, 2007
Signature: Lars Gertmar
Name: Lars GERTMAR
Address: Humlegatan 6, S-SE-722 26 VÄSTERÅS, Sweden

EXECUTED, this 27th day of March, 2006 ⁷

Signature: Sture Lindahl
Name: Sture LINDAHL
Address: Gässlingavägen 5B, S-SE-227 35 LUND, Sweden

EXECUTED, this ____ day of _____, 2006

Signature: _____
Name: Juhani MANTERE
Address: Nurmitie 3, FIN-SF-04300 TUUSULA, Finland

EXECUTED, this ____ day of _____, 2006

Signature: _____
Name: Erik KOLDBY NIELSEN
Address: Dyrupgaardvaenget 6, DK-5250 ODENSE, Denmark

EXECUTED, this ____ day of _____, 2006

Signature: _____
Name: Leif-Erik WRAAE
Address: Krosselvaenget 17, DK-5690 TOMMERUP, Denmark

EXECUTED, this ____ day of _____, 2006

Signature: _____
Name: Sture LINDAHL
Address: Gäslingavägen 5B, S-SE-227 35 LUND, Sweden

EXECUTED, this Monday of 26. March, 2007
Signature: Juhani Mantere
Name: Juhani MANTERE
Address: Nurmitie 3, FIN-SF-04300 TUUSULA, Finland

EXECUTED, this ____ day of _____, 2006

Signature: _____
Name: Erik KOLDBY NIELSEN
Address: Dyrupgaardvænget 6, DK-5250 ODENSE, Denmark

EXECUTED, this ____ day of _____, 2006

Signature: _____
Name: Leif-Erik WRAAE
Address: Krosselvænget 17, DK-5690 TOMMERUP, Denmark

EXECUTED, this ____ day of _____, 2006

Signature: _____
Name: Sture LINDAHL
Address: Gässlingavägen 5B, S-SE-227 35 LUND, Sweden

EXECUTED, this ____ day of _____, 2006

Signature: _____
Name: Juhani MANTERE
Address: Nurmitie 3, FIN-SF-04300 TUUSULA, Finland

EXECUTED, this Wed day of March, 28, 2006

Signature: Erik Koldby
Name: Erik KOLDBY NIELSEN
Address: Dyrupgaardvaenget 6, DK-5250 ODENSE, Denmark

EXECUTED, this Wed day of March 28, 2006

Signature: Leif-Erik Wraae
Name: Leif-Erik WRAAE
Address: Drosselvaenget 17, DK-5690 TOMMERUP, Denmark